

Chapter 12

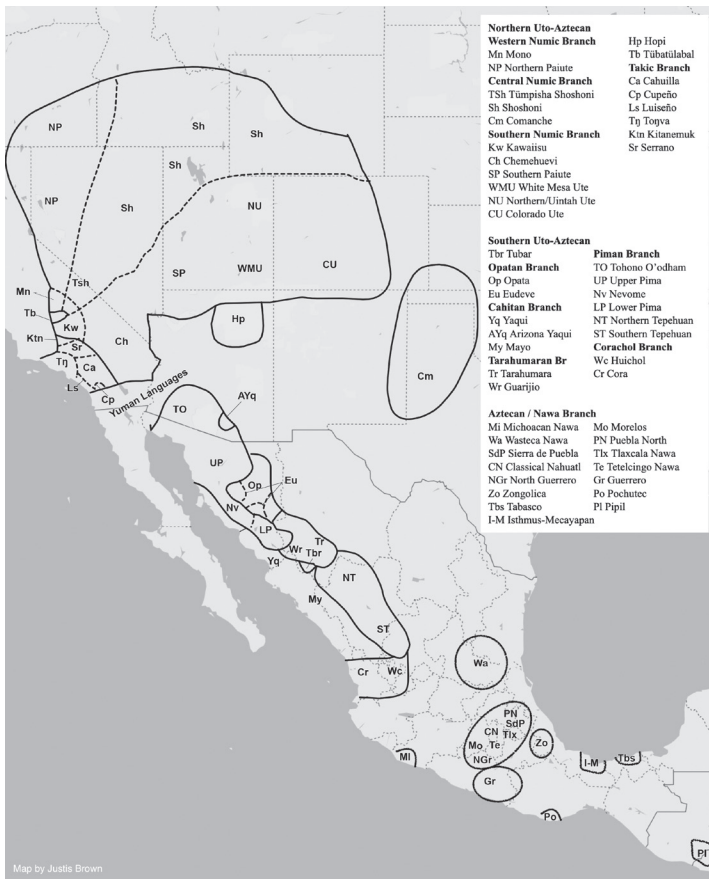
Truths Tongues Tell on a Book of Mormon Language Family

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This essay touches on truths that the Uto-Aztecan (UA) tongues are telling us. The substantial amount of Semitic and Egyptian language components in Uto-Aztecan is a growing body of data, allowing perspectives on (1) what original Near Eastern languages the early Uto-Aztecan peoples were dealing with, (2) where the Near Eastern emigrants came from in the Old World, and (3) what New World homeland they spread from to their present locations. These data also clarify what Book of Mormon scholars have debated for decades: (4) what the Nephites knew of Egyptian—a writing system or the actual language, and (5) why the Nephites and people of Zarahemla were initially unable to understand each other though they both left Jerusalem only four centuries earlier.

Book of Mormon research relating to language—such as that of B. H. Roberts¹ and Hugh Nibley² and studies on Hebraisms³ and chiasmus⁴—has focused on the language of the text, with scholars proposing various ideas about the languages of Lehi and his descendants. The missing elephant not in the room is what today's descendant Lehiite languages might have to say about Lehi's languages. Fortunately, language families cannot be fabricated, nor can numerous lexical correspondences shared by thousands of speakers of related languages be susceptible to hoax or dismissed as coincidence. The challenge is that assembling and analyzing thousands of data points across dozens of related languages requires lifetimes as linguists reconstruct the ancient proto-language from the related living languages descended from it.

B. H. Roberts was understandably disappointed not to find language evidence for Lehi in the Americas,⁵ though the data had only begun to be gathered by his day. That presumed lack is often attributed to Lehi's posterity being swallowed up by America's already-sizable populations and language families, which certainly happened to many Lehite lines. Curious, I investigated most of the 190 language families of the Americas⁶ and found much Semitic and Egyptian in Uto-Aztecan. I also found lesser hints diffused into very few other language families, maybe 3 percent of the 190, the latter number suggesting many origins for America's Indigenous populations.



Distribution of Uto-Aztecan languages. Map courtesy of Justis Brown.

Map of Uto-Aztecan Languages

The forty-plus Uto-Aztecan (UA) languages divide themselves into eleven branches of more closely related groups, as listed in the box above. The four branches of Northern Uto-Aztecan (NUA) either remained in what is now the Los Angeles area or spread to the north, northeast, and east.⁷ Southern Uto-Aztecan's (SUA) seven branches stretch from the Pima in southern Arizona and southward along the west coast and Sierra Madre Mountains of west Mexico to the twenty-eight Nahuatl (Aztec) languages scattered through central and southern Mexico and points south.

The strength of the UA tie to the Near East begins with 1,657 cognate sets aligning with Semitic and Egyptian. (A cognate set is a group of related words descended from the same proto-form, or original ancient word.) The 1,657 UA sets aligning with the Near East are ten times as many as in the first founding document of most North American Indigenous language families. In addition, many unusual Near Eastern semantic combinations carry over into UA, as well as some grammatical parallels, and Semitic phonology explains some UA phonological puzzles not previously explained.

Many UA cognate sets correspond to early or pre-Hebrew forms. In the tables below, the UA forms in the right column are reconstructed Proto-Uto-Aztecan (PUA), or the likely original words that the UA cognates descend from. In each numbered pair, the second number identifies the word's place in *Exploring the Explanatory Power of Semitic and Egyptian in Uto-Aztecan*.⁸ A few linguistic helps are provided in note 8.

Hebrew / older or pre-Hebrew

1/1 -iim / *-iima 'plural suffix'

2/2 ni- / *na-

3/3 yaašab / *yašiba 'sit, dwell'

Proto-Uto-Aztecan (PUA)

*-ima 'plural suffix'

*na- 'passive, reciprocal prefix'
in both Hebrew and UA

*yasipa 'sit, dwell'

We see in cognate sets 1–3 that UA matches the vowelings that are older than the Hebrew Old Testament's vowels. In sets 4–8 below (and thirty others), we see Hebrew *b* consistently changed to UA *kw* (much like the correspondence of Latin *kw* and Greek *p*). For that reason I refer to that corpus of data as Semitic-k^w.

4/4 baašel 'cooked, boiled, ripe'	*k ^w asī 'cooked, boiled, ripe'
5/5 baasaar 'meat, penis'	*k ^w asi 'tail, penis, meat'
6/6 baalaš 'swallow'	*k ^w ilo 'swallow' (for š > -o- rounding, see 33–35)
7/7 bahamaa 'back, ridge, high place'	*k ^w ahama / kwihimī 'back'
8/24 bakaʔ / bakaa 'cry'	*k ^w ikī '(shed) tears'

The above samples come from some four to five hundred UA cognate sets of Semitic-k^w, much like Phoenician/Canaanite, often with older vowelings that linguists can see were original.

In contrast, other similarities between Semitic and UA had a different set of sound correspondences, meaning that two different groups of Semitic speakers came together, merging their languages. In this other Semitic idiom, Semitic *b* had changed to or corresponded to UA **p*, and other consonants also devoiced *d* > *t*, *g* > *k*, as well as *b* > *p* (> means 'changed to').

	<u>Hebrew / Aramaic / Semitic</u>	<u>Proto-Uto-Aztecan</u>
9/527	baraq 'lightning'	beroq/*pirok 'lightning'
10/531	bw' / boo' 'come/ing, way to'	*poo' 'road, path, way'
11/559	bakaʔ / baka' 'cry'	*paka' 'cry'
12/528	bayit/beet 'house', bat-uu 'lie down, pl' >	*piti 'house', *pitu 'lie down, pl'
13/532	*booşer 'eye'	*pusi 'eye'
14/534	batt 'daughter'	*patti 'daughter'
15/535	bəquuraa 'cattle, livestock'	*puku 'domestic animal'
16/550	bəsar 'flesh, penis'	*pisa 'penis'
17/570	'axar 'after, following, another'	*wakay 'two, after' (like Spanish <i>segundo</i> 'second' and <i>seguir</i> 'follow')
18/571	ya'ya' 'beautiful'	*yawáywa / yī'aayī'a 'pretty, good-looking'
19/566	'ari 'lion'	*wari 'mountain lion'
20/567	ya'amiin-o 'he believes him/it'	*yawamino 'believe him/it'

I refer to this new corpus of more than seven hundred sets as Semitic-p because in it Semitic *b* changed to UA **p* (in contrast to the corpus of four to five hundred sets wherein *b* > UA **kw* and is called Semitic-k^w). In the above Semitic-p data, the last four (17–20) show the glottal stop going to *w* (*'* > *w*), which change also happens in some Arabic dialects, and Semitic *x* > *k* (17). Those three correspondences (*b* > *p*, *'* > *w*, *x* > *k*) are features of Semitic-p but not of Semitic-k^w. The examples may seem few in this article, but most sound correspondences are solidified by twenty to thirty examples each.

A number of Egyptian parallels also exist and with the same correspondences as the Semitic-p sets. The vowels of ancient Egyptian were not usually written.

	<u>Egyptian</u>	<u>Proto-Uto-Aztecán</u>
21/138	bši / bšw 'spit out, vomit'	*piso 'vomit'
22/142	bik 'falcon'	pik 'hawk'
23/294	xpš 'foreleg, thigh'	*kapsi 'thigh'
24/295	xpd 'buttock(s)'	*kupta 'buttocks'
25/170	txi / txw 'drunk, drunkard'	*tiku 'drunk, angry'
26/174	sxt 'grass, willow'	*sakat 'willow, grass'
27/147	m'i 'lion'	*mawiya 'mountain lion'

The Egyptian sets also have *b* > *p* (21–22), *x* > *k* (23–26), and *'* > *w* (27, 37), with all the same sound changes as Semitic-p. Note that *w*, *o*, and *u* are similar in sound (21, 25), all being round vowels. The Semitic-k^w sets number over 400, and the Semitic-p sets (700+) have the same sound correspondences as the Egyptian sets (400+), so the Semitic-p and the Egyptian seem to have been spoken or used by one people, and that people had merged with another group, the Semitic-k^w speakers. That brought to mind the Nephite-Mulekite merger. The Nephite record speaks of both Hebrew and Egyptian; and in UA the Semitic-p data and the Egyptian data, both having the same sound changes, suggest one people spoke a mix of those two languages. The Semitic-k^w data show different sound changes and final vowels that are more like Phoenician or old Canaanite than Israelite Hebrew. That and other factors may suggest that

the Mulekites came on a Phoenician vessel. Then the two groups combine, and all such language correspondences point to a real possibility that Proto-Uto-Aztecán was the language of the Nephite-Mulekite merger.⁹

Nephi wrote “in the language of [his] father, which consist[ed] of the learning of the Jews and the language of the Egyptians” (1 Nephi 1:2). That verse started nearly a century of debate.¹⁰ Sidney B. Sperry and most BYU Hebraists were of the opinion that the Book of Mormon authors were writing Hebrew in an Egyptian script but were not dealing with the actual Egyptian language,¹¹ while Nibley maintained that the Nephites knew and used both the Hebrew and Egyptian languages.¹² Yet the surest answer might be found in Lehitic languages if they can be identified and are found to retain enough vestiges of those original languages to tell us. Finding significant traces of Egyptian in UA settled that question in my mind and may, with time, help us determine the time and place of that particular stage and dialect of Egyptian. Presently, the Late Egyptian of Joseph’s or Israel’s sojourn seems probable.¹³ I was also surprised to find the Semitic-p data to be heavily Aramaic,¹⁴ perhaps more Aramaic than Hebrew. Consider the Aramaic data below, with the devoicing of *d* > *t* and *b* > *p*:

	<u>Aramaic /Semitic-p</u>	<u>Proto-Uto-Aztecán</u>	<u>not like Hebrew</u>
28/616	*dakar ‘male, man’	*taka ‘man’	zakar ‘man’
29/617	diqn-aa ‘beard/ chin-the’	*tī’na ‘mouth’	haz-zaaqaan ‘the-beard/chin’
30/618	di’b-aa ‘wolf-the’	*tī’pa ‘wolf’	haz-zə’eb ‘the-wolf’
31/1409	kuuky-aa ‘spider-the’	*kuukya ‘spider’	—
32/1274	kaukb-aa ‘star-the’	*kuppaa ‘to shine (of stars)’	hak-kookaab ‘the-star’

Note that these UA forms (28–30, and many other Semitic-p forms) show UA **t*- from Aramaic *d*-, unlike Hebrew *z*. Furthermore, Aramaic has -aa ‘the’ as a suffix after the noun, not before it as with Hebrew and English, and the UA forms agree with the Aramaic citation forms, with suffixed -aa ‘the’ (28–32).

The Semitic pharyngeals ʕ and ħ both tend toward rounding (*w/o/u*) in UA. In fact, English *o* comes from the ancient Phoenician/Hebrew ʕ symbol, which was *o*. It later came to be Greek *o* and then Latin *o* and finally English *o*, retaining the circle symbol for that low back round vowel through four alphabets and three millennia. That *o*-symbol shows that the pharyngeal tended to rounding in ancient Phoenician also, as in UA.

	<u>Semitic ʕ</u>	<u>Proto-Uto-Aztecan</u>
33/86	ʕəʕaaqaa ‘yelling, screaming, call’	*coaka ‘cry’ (c = ts, as in catsup)
34/87	ʕgz / ʕagaza ‘grow old (of women)’	*wigaca- ‘grow old (of women)’
35/94	rʕʕ / raʕaʕa ‘act wickedly’	*rasawa ‘fornicate, bad, permissive’
	<u>pharyngeal ħ to UA hu/ho at first of word</u>	<u>Proto-Uto-Aztecan</u>
36/181	Egyptian ħnqt ‘beer, drinker’	*hunaqa ‘drunk’
37/370	Egyptian ħ’ ‘behind, around’	*huwī ‘around’

In contrast to the Egyptian and Aramaic in Semitic-p, the Semitic-k^w data resemble Phoenician more than Hebrew, though Hebrew is Israel’s adopted dialect of Canaanite/Phoenician. For example, the short final vowels in (1) *-ima* and (3) *yasipa* are not in Hebrew but are in other dialects of Northwest Semitic, like Ugaritic.¹⁵ The Semitic-k^w data also show the Phoenician sound mergers (both ʕ and ġ > ʕ, and both ħ and x > ħ), yet those mergers did not happen in Israelite Hebrew until a millennium later, and so both Semitic-p and Egyptian have the four separate sounds, like ancient Israeli Semitic, while Semitic-k^w combined the four to two, as happened in Phoenician by the time the Phoenician alphabet came to be.¹⁶

Polysemic Matches: Parallel Sets of Multiple Meanings

Besides the strength of 1,657 cognate sets, several semantic (meaning) combinations add more strength to the case of UA descent from Semitic and Egyptian. Some semantic combinations or changes are common

and not surprising, like *chin* to *mouth* or *cheek*. But other combinations are very dissimilar. In set 26 above, we see a perfect phonological (sound) match, and both the Egyptian and UA forms mean both ‘willow’ and ‘grass.’ Now, I never imagined willows and grass looking alike, so for that unusual combination of meanings to be in Egyptian and then also carry over to UA is remarkable. We see in set 38 below that the Egyptian means ‘serpent, partner,’ and then we find ‘snake, twin’ in UA also. What is the probability of two such divergent meanings appearing in both Egyptian and in UA by chance and the phonology matching as well?

	<u>Egyptian</u>	<u>PUA</u>
38/332	qrḥ / *qarḥat ‘serpent, partner’	*koṛwa ‘snake, twin’ ¹⁷
39/182	ḥotpe ‘peace, reconcile, bury, go down, fall out (hair)’	*huppi / hoppi ‘peace, appease/pacify, go down, hair fall out’

Note the three very different meanings of Egyptian *ḥotpe* (39)—peace, go down, fall out (of hair)—and the same three meanings in UA **huppi*. In set 40 below, two far different meanings—large bird of prey and a northern star or constellation—are again in both Semitic and UA. The probability that both meanings would appear in both Semitic and UA by chance approaches zero. Besides these four (26, 38, 39, 40), there are other unusual semantic combinations.

A cluster of consonants absorbing the first to double the second (like English *in-legal* > *illegal*) is seen in items 32 (*-kb-* > *-pp-* of Semitic-p), 39 (*-tp-* > *-pp-* of Egyptian), and 42 (*-nb-* > *-bb-* > *-kw-* of Semitic-k^w) below. Four items below (40–43) of Semitic-k^w introduce another sound change of Semitic-k^w: Both *g* and *q* correspond to or changed to *ḡ* (the *ng* of *sing*).

	<u>Semitic</u>	<u>Proto-Uto-Aztecan</u>
40/953	ʕuqaab ‘eagle’ and ‘a northern constellation’	*yunaḡapi ‘vulture, a star in the north’
41/942	qiinaa ‘funeral song, dirge, wailing’	*ḡinaḡna ‘feel sorry for, be broken-hearted’
42/21	ganba ‘side, next to’	*gabba > *ḡakwa ‘side, from/ at the side of’
43/925	ʕagap-u ‘wing, pinion feather, arm’	*aḡapu ‘wing, arm’

Keep in mind that Semitic-*k*^w's initial *b* and doubled *bb* go to *kw* (as in 4–8, 42), but intervocalic *b/p* remain *p* (as in 40, 43).

Some Grammar Preserved in Descendant Languages

Further validation of UA's tie to the Near Eastern languages is found in some grammatical patterns that are also preserved in the descendant languages of Proto-Uto-Aztec (PUA). Pieces of Semitic verb conjugations (forms) are found in UA, though not the full conjugation. The perfective of Hebrew *lqḥ* / *laaqaḥ* 'take (in hand), grasp, take as wife' (Arabic *lqḥ* / *laqaḥa* 'to impregnate') is found in Hopi *lööqö-* 'she married', in Tubatulabal *looko'lookat* 'be pulled out', and Tubatulabal *lokook* 'uproot' in the 'grasping' sense. The Hebrew imperfective is *yiqqaḥ* 'take, take as wife' (< **ya-lqaḥ*), which we see in UA **yikoC* / **yokoC* 'to copulate'. Note the rounding effect (-*o*-) of pharyngeal *ḥ* in all the forms.

Another set of morphology (grammar) alignments is Hebrew *kṯ* 'to grind': perfective Semitic stem *kittaš* > UA **kitta*; imperfective Semitic stem *-ktušu* > UA **tusu* 'grind'; and a noun form, Hebrew *makteš* 'grinding stone' > UA *mattaš* 'grinding stone, crush'.

Uto-Aztec Phonological Puzzles Explained

Most compelling of all is that for a century since Edward Sapir established UA as a language family (1913, 1915),¹⁸ linguists had no answer for several phonological peculiarities in UA, yet the Semitic and Egyptian data underlying the UA forms explain many of those puzzles.¹⁹ For example, PUA **w* remains *w* in most UA languages, but in Hopi the UA **w* often appears as Hopi *l* before low vowels, while at other times **w* remains Hopi *w* before the same vowels. No one had an explanation for that seemingly inconsistent behavior. However, the Semitic and Egyptian data show that when UA **w* is from an actual *w*, it remains Hopi *w*, but when UA **w* is from laryngeals like Semitic ʾ or ʕ, then UA **w* becomes Hopi *l*, turning that inconsistency into a consistency with the Near Eastern data.²⁰ A similar sound change happens in some Arabic dialects.

Another previously unresolved enigma is Tarahumara's initial *r* and *t*. Tarahumara shows *r* at the beginning of words corresponding to other UA languages having *t*. The natural conclusion among UA specialists

was that PUA **t* corresponds to Tarahumara *r*, which is partially correct. Yet there are also as many instances of Tarahumara initial *t* corresponding to UA **t* in the other UA languages. No one had been able to explain why PUA **t* sometimes shows Tarahumara *r* but sometimes *t*; in fact, the exceptions were never mentioned, as if wishing the inconvenient data did not exist. The solution is that Semitic *r*- and Egyptian *r* changed to UA *t* at the beginning of words except in Tarahumara, where it remained *r*. So Tarahumara has *r* corresponding to Semitic and Egyptian *r*, and Tarahumara *t* corresponding to Semitic and Egyptian *t*, again an inconsistency made consistent in light of the Semitic and Egyptian data.²¹

Another strong support is that a high percentage of the most widespread UA cognate sets align with the Semitic and Egyptian data. Of the UA cognate sets that are found in nine, ten, or all eleven of UA's eleven branches, 90 percent of those sets align with Semitic and Egyptian vocabulary. Of UA sets found in four, five, six, seven, or eight of UA's eleven branches, 66 to 86 percent align with the Near Eastern sources.²² By contrast, Modern English kept only 15 percent of its Old English vocabulary; the other 85 percent was replaced by loanwords from French, Latin, and other languages.²³ For UA to have most of its cognate sets from Semitic or Egyptian is highly significant.

What Does It All Mean?

Let us now consider what the preceding language data may say about Book of Mormon peoples. Keep in mind that while most Native American language families show no language connection to the Near East, UA does. In fact, its abundance of parallels is unique, though UA speakers are certainly mixtures with other lineages, just as all Native Americans and most of us are products of multiple ethnic ancestries. First of all, the fact that the Near Eastern language data appear in a high proportion in *all* branches of UA, not just in some branches, opens the possibility that Book of Mormon lineages played a major role in the formation of UA, even in Proto-Uto-Aztec.

Second, the Egyptian and Semitic-*p* have the same sound changes, suggesting both were used by the same people, which brings to mind the Nephites' use of both Hebrew and Egyptian.

Third, the Semitic-*k^w* sound changes agree with Phoenician, not Israeli Semitic, having merged *ḥ* and *x* > *ḥ*, and *ʕ* and *ḡ* > *ʕ*, which

happened in Phoenician by the time the Phoenician alphabet had developed, perhaps about Moses' time. However, that merger of consonants did not happen in Israeli Semitic until a millennium later, shortly before Christ and long after Lehi. In contrast, Semitic-p agrees with preexilic Israeli Semitic, retaining all four original consonants (x, ḥ, ġ, ʕ), but Semitic-k^w exhibits the same mergers found in Phoenician.²⁴

Fourth, the people of Zarahemla had named their primary river Sidon. In the Old World, Sidon was the major port city of the Phoenician shipping industry, so the Sidon was a feature of Phoenician, not Israelite, geography. The combined facts that Semitic-k^w has Phoenician sound changes (but not Semitic-p) and that the people of Zarahemla named their main river Sidon may mean that the Mulekites escaped on a Phoenician vessel with Phoenician passengers. If Mulek's Israelite group came to the New World with accompanying Phoenicians, that would explain the Mulekites' Phoenician pronunciation (the sound changes in Semitic-k^w) and why the river was named Sidon.

Fifth, about 55 BC many Nephites "departed out of the land of Zarahemla into the land which was northward," and Hagoth's shipping industry sometimes launched into the west sea and sailed thousands of emigrants to the land northward (Alma 63:4–9). Consistent with that northern migration, ten of the eleven branches of UA are found along or near the west coast of Mexico or southern California. All of Northern UA is known to have started in the present Los Angeles area, with Hopi and Numic spreading inland to fill much of the US Southwest.²⁵ Only the Nahua (Aztec) branch—the southernmost in the family—dots areas from the east coast to the west coast over most of Mexico and areas farther south.

The above points align with the possibility, if not probability, that PUA is the language of the Nephite-Mulekite merger. Many people assume that the Nephites were all killed (Mormon 6–7), but their continuance is stated, for example, in Doctrine and Covenants 3:16–18, Alma 45:13–14, and 2 Nephi 26:15. Moreover, the northward migrations of ten of the eleven UA branches may have put those ten branches beyond the destruction of AD 400. That may well mean that the UA peoples are largely descendants of those migrants to the various west-coast lands northward.

Sixth, UA DNA alignments with Arab DNA are noteworthy²⁶ because Arab populations are largely of the same gene pool(s) as Lehi and Ishmael and much of Israel.

Mutually Unintelligible Languages?

One might reasonably ask, “If Lehi and Mulek both left Hebrew-speaking Jerusalem only four hundred years before their groups united, how would their languages have changed enough that the two peoples could not understand each other?” A plausible answer, again, is found in UA. UA shows the significant differences between the Nephite and Mulekite languages that caused them to be mutually unintelligible: (1) The sounds changed in different ways, as seen in the Semitic-p sound changes versus those of Semitic-k^w, (2) each had many different words because Mulek’s language was more Phoenician-like and Nephi’s was heavily mixed with Aramaic and Egyptian, and (3) before uniting, they likely lived next to peoples who spoke different Native American languages, which would have changed the Nephite and Mulekite languages in different directions before the unification of the two peoples. Intensity of contact is a major factor in rates of language change, and the large numbers of unrelated languages in most places, especially Mesoamerica, certainly encouraged change.²⁷

We read that “Mosiah caused that they [the people of Zarahemla] should be taught in his [Mosiah’s Nephite] language” (Omni 1:17–18). From that one might assume that the people of Zarahemla wholly adopted the Nephite language and discontinued their own; however, the UA data suggest that the merging of the people also resulted in a merging of their languages, though the resulting mix was about three-fourths Nephite language (Semitic-p and Egyptian) and about one-fourth the people of Zarahemla’s Semitic-k^w. So the people of Zarahemla did learn the Nephite language, but much of their own also came into the mix, and degrees of bilingualism are usually part of transitions to one language.

The Aramaic in Semitic-p

Why would Semitic-p have so much Aramaic? To understand that, we need to consider the linguistic background of Lehi’s group. Because the Book of Mormon mentions Hebrew, and because Lehi and

Ishmael left Hebrew-speaking Jerusalem, we naturally think the Lehi-Ishmael party spoke Hebrew, as we can be sure they could. However, various facts may mean the Lehi-Ishmael families were appreciably bilingual—that is, also speaking Aramaic, and some of them may have preferred Aramaic. With that in mind, consider the following.

First, Israel's original language was Aramaic, not Hebrew. Abraham, Isaac, Jacob, Rebekah, Laban, Leah, and Rachel all came from Aramaic-speaking areas. Genesis 25:20 speaks of Laban, the Aramean (*Arammiy* in Hebrew). He was Jacob's uncle, Rebekah's brother, and Leah and Rachel's father. Second, Aramaic was also a lingua franca (areal or international language) from Aram east of Israel to Phoenicia's coast westward, and Northern Israel was between the two. So, did Northern Israel's population really set aside Aramaic upon entering Canaan to learn Canaanite? (Hebrew was Israel's resulting dialect of Canaanite.) More likely are degrees of bilingualism while adding the Phoenician/Canaanite literary language to their native Aramaic. Some Semitic scholars believe that Northern Israel may have never dropped their Aramaic, but became bilingual in both Aramaic and Hebrew, with some areas possibly preferring Aramaic.²⁸ Third, Manasseh's northeast land grant was next to Aramaic speakers, which would have encouraged a percentage of Manasseh to retain Aramaic or reacquire it even if they lost it. Ishmael's and Lehi's Manasseh/Josephite great-grandparents were likely among the refugees escaping to Jerusalem at the Northern Kingdom's demise. Those refugees doubled or tripled the size of Jerusalem²⁹—perhaps outnumbering the original population—and some, if not most, may have brought Aramaic with them. Fourth, note also that Nephi said that his father's language consisted of “the learning of the Jews” (1 Nephi 1:2), but he did not say the language of the Jews (Hebrew).

The Term *Nephite* in Uto-Aztecan

Further suggestion that Uto-Aztecan may descend from the Nephite-Mulekite merger lies in some UA groups calling themselves Nephite(s) as pronounced in ancient Semitic or having such among their kin-terms. In Hebrew a suffixed *-i/-iy* means “of that group”; for example, English *Israel-ite* is *Israel-i* in Hebrew, as the Israelis call themselves in modern Israel today. The word *Nephite* in ancient Hebrew would

be pronounced Nephi-y (like “navy”) but with *ph/f* instead of *v*. The names Lehi and Nephi are prominent in Epigraphic South Arabic and in Saudi Arabia today, continuing the original pronunciation *Laḥi* and *Nafi* (*a* as in father, *i* as in Kelli); however, the Nephite idiom evidently assimilated *a* to *e*. *Nephites* plural would be *Nephiyyiim*, or with the older Northwest Semitic masculine plural ending *-iima*, would be *Nephiyyiima*, though the plural suffix reduces in most UA languages to *-me* or *-ime*, yielding something near *Nephiime* with a long *ii* (as in *feed*). Further, *ph* is from an original *p*, which goes to *v* in the Pima branch of UA languages.

The Nevome were a UA group of the Pima branch, located in northwestern Mexico. The Nevome language is no longer spoken, but with one vowel change, *Nevome* (**Nepome*) matches *Nepime* in five of six sounds, and for a vowel to change to a round vowel (*o*) between two bilabials, *p* and *m*, is natural enough. So, a fairly natural vowel change for one of the six sounds puts **Nepome* quite derivable from *Nepime* (< *Nepiyyiima*).

Second, the Pima dialects in Arizona exhibit another intriguing term: *nawoj* or *nawaj*, meaning ‘friend, brother, sister, cousin’. Pima *w* is from PUA **p*; and Pima *j* is from PUA **y*, so the one variant reconstructs to **napay*, identical to another Semitic form for *Nephite*. In fact, the Aramaic plural for ‘Nephites-the’ would be *Napayy-aa*.

Third, another Pima term—*naipijju*—is an irregular plural of *nawaj* (< **napay*).³⁰ Remember that Pima *j* is from PUA **y*, so *naipijju* is from *naipiyyu*, and Pima languages are known to anticipate the vowel following a consonant: *naipiyyu* from **napiiyyu*. In contrast to the mentioned Hebrew masculine plural *Nepiyyiim(a)*, the feminine plural would be *Nepiyyoot* or *Napiyyoot* ‘Nephite women’ losing only the final *t* to be this Pima plural **napiiyyu*, meaning ‘friends, brothers, sisters, cousins’ or basically ‘friends and relatives’; and friends and relatives would be Nephites among Nephites. Also of interest is that the Pima singular term matches a Semitic singular and the irregular Pima plural term aligns with one of the Hebrew plurals.

Fourth, the Cora are a UA people farther south in the state of Nayarit, Mexico, and the Cora call themselves *Náayeri* or *Naáyari*,³¹ which name varies slightly in different works. Obviously, the state Nayarit was named after the Naáyari people. Now, in the Nahua or

Aztec branch and in the Corachol branch (to which Cora belongs), UA intervocalic **p* is often lost between vowels, and between two vowels of different stress qualities (*aa*) is nearly evidence for such a loss: *Napáyari*. Regarding the Aramaic plural mentioned earlier—*Napáyya* for ‘Nephites’—Aramaic’s stress would have been on the same syllable as the *Naáya* variant. A probable explanation for final *ri* is that it is a common noun suffix in SUA languages. That would leave *Naáya* or *Napáya* quite identical to Aramaic *Napáyya* for ‘Nephites-the’. However, a lack of certainty on *ri* or on loss of **p* hardly precludes our keeping this term in mind as a very decent possibility, if not probability. Others exist, but let the above suffice for now.

Language Change Evidenced in the Book of Mormon

All living languages are always changing, whether slowly, averagely, rapidly, or suddenly (such as creoles). A culture’s best efforts to the contrary cannot halt language change, and contact with other languages hastens that transformation. That may have been Nephi’s concern after some decades in the New World and seeing his posterity’s language begin to change due to associating with their New World neighbors speaking unrelated languages: “It is wisdom in God that we should obtain these records, that we may *preserve unto our children the language of our fathers*; and also . . . preserve unto them the words . . . of all the holy prophets” (1 Nephi 3:19–20; emphasis added). Nephi understood that teaching children from written records held more hope for correct continuation than what each generation might learn from the spoken language around them, because the spoken language inevitably changes, and he could probably see his grandchildren’s language changing, especially if in regular contact with the neighbors’ unrelated languages.

Alma hints that the natural course of language change had created various dialects among the Nephites. About 83 BC, Alma said to the Nephites in Gideon, “Behold my beloved brethren . . . I attempt to address you in my language; yea, by my own mouth, seeing that it is the first time that I have spoken unto you” (Alma 7:1). It seems that Alma figured their dialect was close enough that they would be able to understand most of what he would say, though “attempt” also

suggests that he knew their understanding might not be perfect, but good enough to outweigh the more cumbersome use of a translator. And “address you in my language” also suggests that Alma’s language (dialect) was different from their language (dialect). Then, Mormon and Moroni lived four and a half centuries after that, about halfway between Nephi and Columbus.

Moroni’s well-known statement fully admits language change: “the characters which are called among us the reformed Egyptian, being handed down and *altered by us, according to our manner of speech . . . but the Hebrew hath been altered by us also*” (Mormon 9:32–33; emphasis added). Centuries of written records of their language enabled them to recognize that their manner of speech had been altered or changed. If only speaking their language (without written records), they would have noticed only the changes in a lifetime, but not those since 600 BC. In fact, if the language(s) on the plates were the basis of their generational education, that may explain how Egyptian came into UA, whether Lehi spoke Egyptian or not, but could read it. After AD 597, when St. Augustine brought Catholicism with its Latin language to England, much Latin vocabulary made its way into Old English,³² though Latin was hardly spoken. Later, during the Renaissance, another sizable dose of Latin came into English when Latin was the language of learning and English was not allowed in the schools, at which time many more began learning Latin and proportionately more Latin came into English. So if a portion of the brass plate records were in Egyptian, then reading or learning from that record could have brought Egyptian language into spoken Nephite, just as Latin was brought into English. King Benjamin “caused that they [his sons] should be taught in all the language of his fathers, . . . for he [Lehi] having been taught in the language of the Egyptians therefore he could read these engravings, and teach them to his children” (Mosiah 1:2–4), whether Lehi spoke Egyptian or not.

Mispronouncing Written Records

In UA there is evidence that some words were lifted from a written source, but were mispronounced, adhering too literally to a certain consonantal spelling. In ancient Hebrew and Semitic generally, only the consonants were written. From the Semitic root *nwr* ‘light, fire’

are various derived nouns: Hebrew *neer* (*nr*) ‘light, lamp’; Hebrew *mānooraa* (*mnwrh*); and a form *naar* ‘fire’ in Arabic and probably some dialects of Aramaic, written with the consonants *nʾr*.³³ The middle ʾaleph (which was often a glottal stop) in this case signifies a long vowel *aa*. In Semitic languages the ʾaleph (ʾ) serves two purposes: either as a glottal stop or as a long *aa* vowel. Interestingly, UA speakers mistook this ʾ to be pronounced as a glottal stop in UA **naʾya* / *naʾay*, ‘fire’ (*r > y*). The same seems to have happened in *naab-aa* ‘nit, louse egg-the’ also optionally written with a middle ʾaleph (*nʾb*) to signify a long vowel, but again was pronounced in UA **noʾpa*.³⁴ A third case is Hebrew *nbl*, meaning ‘skin, bottle (usually of wine)’ written two ways: Hebrew / Aramaic / Ugaritic *nbl*, but in Syriac both *nbl* and *nʾbl*.³⁵ In the other UA branches is UA **napī* / *napu* / *napo* ‘prickly pear cactus or fruit’ (from which alcoholic drink is made), but in the Nahua or Aztecan branch is *noʾpal-li* with the glottal stop and the final *l*. It would appear that an original of Semitic **naabal* had a long and stressed first vowel leading to UA **napV* (*V* means any vowel) from the spoken language and thus the *a* quality is preserved, as it remains *a* in most UA languages, while the second vowel varies greatly, typical of a short unstressed vowel. So the *nʾbl* spelling was intended to show a long first vowel, yet again *noʾpal-* appears lifted off a written record with the glottal stop (ʾaleph) pronounced and the *l* revived, while UA **napV* comes from spoken forms. Nephite records likely had the rare *nʾbl* versus the more usual *nbl*.

Where Did Semitic-p Come from?

A number of forms in Semitic-p align with forms unique to northern Palestine, where Northern Israel was located. The various forms of Hebrew *šakem* / *šekem* / *šikm-* (with suffix) ‘shoulder’ are close to UA, but the vowelism in Samaritan Aramaic *šekam* is identical to the vowelism in UA **seka* ‘arm, hand’ (semantically, ‘shoulder’ slides down to ‘arm/hand’ in other terms as well).³⁶ The Samaritans were not only located where Northern Israel dwelt but were at least partially descended from Northern Israelites. Second, a common Semitic term *baqar* / *baaqaar(aa)* / *baqraa* ‘cattle, livestock’ in Hebrew, Arabic, most Semitic languages, and most Aramaic dialects exhibit various combinations of short *a* or long *aa* vowels. One exception is the different

vowels of Palestinian Aramaic *bəquur(aa)*, and UA **pukuC* ‘domestic animal’ matches that one form found in the Aramaic where Northern Israel used to dwell.³⁷ The unstressed vowel *a* assimilated to the longer stressed vowel *-uu-*, which change is entirely natural. Nahuatl *no’pal-*, showing the consonants of Syriac *n’bl* mentioned above, is yet a third instance of Semitic-p aligning with the Aramaic dialects where Northern Israel was located.

Where in the Americas Did Proto-Uto-Aztecan Begin?

The homeland or starting place of UA has long been debated without consensus. Earlier guesses had the UA homeland in areas nearer the northern languages. Fowler’s influential flora and fauna study suggested a homeland straddling what is now the US-Mexico border.³⁸ More recently, three linguists who are specialists in UA have proposed UA’s start to be somewhere in Southern UA areas (Mexico) and for three different reasons. Jane Hill sees corn and agricultural terminology in both Northern UA (NUA) and Southern UA (SUA) to suggest a spread northward from southern areas where corn was first cultivated.³⁹ Merrill questions Hill’s case, but a key term, UA **suŋu* ‘ear of corn’ is of Semitic origin (Hebrew *šibboleṯ*, Arabic *sunbul*, both ‘ear of grain’, > **suNkwul* > UA **suŋu*), and even the SUA forms reach Arizona from Nahua regions.⁴⁰ Furthermore, Kemp et al. cite three kinds of human DNA evidence—a rare albumin variant, dental morphology, and blood-group phenotypes—that allow or suggest some northward migrations from what is now Mexico to the US Southwest.⁴¹ Second, Alexis Manaster-Ramer sees the seven SUA branches as more divergent than the four NUA branches, and greater diversity generally means deeper time depths, suggesting that SUA has been separating more centuries than the less diverse NUA branches.⁴² Third, Stubbs points to greater phonological diversity in SUA: for example, in SUA all the reflexes of PUA **k^w* exist in a fairly small area surrounding Tubar—Piman and Opatan *b*, Cahitan *b^w*, Tubar *k^v*, and Tarahumaran *w*—while the NUA branches nearly unanimously reflect *k^w*.⁴³ In other words, a greater variety of changes exist in SUA while NUA lacks such variation, suggesting a greater

time depth in SUA. The three linguists' observations and a DNA study favor a UA origin in Mexico that spread northward rather than a US origin that spread southward, though the matter is still debated.

The various population sizes among UA speakers are also relevant to migration theories. The numbers of speakers of the eleven UA branches presently include three extinct branches (Tübatülabal, Opatan, Tubar); very few speakers of the Takic languages; 3,000 Numic speakers; 6,000 Hopi; but for SUA: 30,000 Piman; 31,000 Corachol; 45,000 Cahitan; and 48,000 Tarahumaran for 10 branches. Notice that the SUA branches are five to ten times larger than the NUA branches. Then the Nahua (Aztec) branch totals 1,500,000 speakers, thirty times the second largest branch and ten times the other ten branches combined.⁴⁴ Yet the Nahua branch was supposedly the last to arrive in place, but became the most numerous by far? One strand of conventional wisdom has it that the Aztecs came from the north only a few centuries before Columbus, and undoubtedly some group(s) did come that late to join those already there. However, others see evidence of Nahua loans in Mayan texts (AD 500–725) that suggest “Nahua speakers were influential in Mesoamerica far earlier than previously believed.”⁴⁵ Dakin and Wichmann provide lexical loans from Nahua into other Mesoamerican language families to side with an early Nahua presence in Teotihuacan times.⁴⁶ Others see Nahua speakers as prominent participants in the Teotihuacan metropolis, whose growth and prominence is dated from AD 100 to 500.⁴⁷ Lyle Campbell cites other authorities dating the Pipil Nahua arrival in El Salvador to about AD 800.⁴⁸ All such observations combine to suggest that Nahua speakers may have been in what is now central and southern Mexico nearer two millennia.

In contrast to the other ten west coast branches, the Nahua branch's twenty-eight Nahua dialects are scattered over the southern two-thirds of Mexico from east coast to west. Some say Nahua's remarkable numbers are due to the Aztecs' conquering other peoples and imposing the Nahua language upon them. That may have been the case for some dialect areas, as some evidence for such has been proposed for one group,⁴⁹ but that evidence has not been convincingly applied to many of the twenty-eight Nahua languages.

The Cora-Huichol branch is west of and closely related to the Nahua languages, as only those two branches share the innovations: **p > h > ø*; and **u > i > i*. Yet in a one-hundred-word list of cognates between UA languages, the correlation between Cora and Huichol is only 58. Although we don't adhere to glottochronology as very accurate, 58 of 100 would put the two Corachol languages separating about three thousand years ago, and the 33–39 between the Corachol languages and the Nahua languages presumes a separation of five thousand years ago, just for the Corachol-Aztec node of a closely related pair of branches.⁵⁰ Even half that number would put Corachol's separation from Nahua twenty-five hundred years ago, all in central Mexico. The lexical distances between Cora, Huichol, and the Nahua languages (33–39) are enveloped within the range of distances between all Northern UA branches (21–42). That suggests a substantial time depth to the split between Cora-Huichol and Nahua in central-to-southern Mexico, the Nahua realms.

Might Many Nahua Speakers Be Peripheral Remnants of the Nephite Nation?

All the above definitely allow, if not point to, a lengthy presence of Nahua in what is now central Mexico. That raises the question: Might some Nahua groups be peripheral remnants of the Nephite nation? Consider the following: If Zarahemla was southeast of the Isthmus of Tehuantepec, where most BYU archaeologists place it, then the final destruction started southeast of the Isthmus and spread to the Isthmus and areas somewhat west and north of the Isthmus. With that in mind, note that from 150 miles west of the Isthmus to 400 miles southeast of the Isthmus are a few small Nahua languages ranging in size from recent extinction (zero speakers) to a few dozen speakers to a few thousand in that area of more than 500 miles of possible previous habitat to the south, though the southerners could also be recent migrants. In contrast to those small numbers, farther to the northwest are Zongolica Nahua's 135,000 speakers 200 miles west of the Isthmus, and Guerrero Nahua's 200,000 speakers about 300 miles west northwest of the Isthmus, and some 300 miles more northwest are 66,000 speakers of Northern Puebla Nahua and 125,000 of Highland Puebla Nahua speakers, and more than 300 miles to the

north-northwest are a million speakers of the three Huastecan Nahua dialects (East, Central, West).⁵¹ Those Nahua languages are closer to Texas than to the Isthmus. So, the numbers of Nahua speakers farther into the land northward total some 1,500,000, while the Nahua speakers straddling the Isthmus, from 150 miles west to several hundred miles southeast, total less than 30,000, perhaps as later arrivals, as some think. Or, in line with the text that the Nephites spread throughout all the land northward (Helaman 3:3–16 and 6:3–10), might that tremendous imbalance in Nahua numbers be due to the AD 400 destruction straddling both sides of the Isthmus some distance (nearly the size of Utah, a sizable war zone when it all happened on foot) but not reaching areas farther north and west?

After the Nephite destruction, Moroni tells us that “the Lamanites are at war one with another; and the whole face of this land is one continual round of murder and bloodshed” (Mormon 8:8). Why did they turn to fighting each other after they destroyed their enemy, the Nephites? A frequent fact of history is that factions unite in defeating a common enemy, but then turn on each other, and their turning on each other may have distracted them from marching the extra 200–350 miles to finish off other Nephite populations farther northwest. Or two, those distant groups may not have been perceived as the problem, but only the Zarahemla-to-Isthmus populations whom the enemy neighbored closely enough to despise. Or three, many far northerners may have been Nephite dissidents, neutrally irreligious, or robbers (Mormon 8:9) long separated from and no longer considered Christian Nephites. After all, the robbers were said to live in the mountains (Helaman 11:28–31; 3 Nephi 1:27) and many Nahua peoples are highlanders. Or four, when there were no -ites among them (4 Nephi 1:7) during the two centuries of peace, the Nephite language may have become something of a lingua franca over larger areas, spoken by many who were not originally Nephites or were not considered Nephites by the vanquishers. Or five, those numbers to the west and north may have swelled with the arrival of refugees fleeing from the war zone. Or various combinations of the above may have been the case for some groups. In other words, the scarcity of Nahua from the Isthmus of Tehuantepec southward may be due to their being wiped out there,

while the populations north and west were not so affected. On the other hand, the conventional wisdom, that the southeast groups settled there later and were thus smaller transplants, is worth keeping in mind while we wait for time to tell.

At age eleven, Mormon was carried by his father into the land southward, even to Zarahemla, and Mormon saw that the whole face of the land was covered by people “as numerous almost, as it were the sand of the sea” (Mormon 1:6–7). So Mormon’s family first lived north of the Isthmus (of the geography under discussion), and Ammaron’s call to Mormon the year before to be the recordkeeper and to remember and record the Nephite contemporary history likely led his father to provide Mormon an educational field trip southward to acquaint his son with the Nephite lands and peoples of the time. Thus, Ammaron, the recordkeeper, evidently also lived in the land northward, in that he was the teacher of the ten-year-old Mormon. Thus, sizable numbers of the Nephites seem to have been in the land northward.

If the Nahua were the Nephite nation straddling the Isthmus, they were neighbors to the Mixe-Zoquean language family (a half dozen languages also straddling the Isthmus), and the Mayan language family (some thirty languages located to the east and south) and the large Otomanguean family (dozens of languages filling most of Mexico west and north of the Isthmus), etc. Due to that greater intensity of contact with other languages, the Nahua branch is known to have been affected more by the Mesoamerican culture environment and to have changed in ways that the other UA language branches did not.

Conclusions

While some of the above perspectives are plausible and await more research, other dimensions are very compelling, if not certain: (1) An enormous amount of corresponding vocabulary exists between UA and the Near Eastern languages of Hebrew, Aramaic, and Egyptian; (2) many unusual semantic combinations in the Near Eastern languages carry over into UA; (3) the Near Eastern phonology explains many previous unknowns in comparative UA linguistics; (4) some UA data point to northern Israel as the geographic origin of some vocabu-

lary; (5) ratios in the UA data and the languages involved suggest UA descent from the Nephite-Mulekite merger and (6) may answer heretofore unresolved debates over statements in the text, such as whether the Nephites knew the Egyptian language or only a script, and (7) answer why the Nephites and Mulekites did not understand each other; (8) plausible terms for *Nephite(s)* appear in some UA languages; (9) the geographic distribution of ten of UA's eleven branches being located near the Pacific coast (now or earlier) is consistent with the account of Nephites who launched into the west sea to go to the land northward; and (10) we see evidence of mispronounced written Semitic forms.

A little more speculative are interpretations relevant to prehistoric movements: (11) the UA scholars who propose evidence that UA spread northward from nearer its southern end rather than southward from its northern end; (12) the lexicostatistical numbers of Cora, Huichol, and Nahua also suggest a long presence in what is now central Mexico; (13) some Mesoamerican scholars see other evidence for Nahua's longer presence in central Mexico than conventional consensus grants; and (14) details in Mormon's and Moroni's narratives seem consistent with the various locations and numbers of Nahua speakers as peripheral remnants of the Nephite nation.

In short, all factors together strongly suggest that PUA is mostly a descendant Lehite language family, and some factors more specifically point to the Nephite-Mulekite merger being Proto-Uto-Aztec. Relative to identifying languages partially descended from Lehi's posterity, UA may ever be a formidable and newly arrived elephant that will not leave the room.

Notes

1. See B. H. Roberts, *Studies of the Book of Mormon*, ed. Brigham D. Madsen, 2nd ed. (Signature Books; University of Illinois Press, 1992).
2. Hugh Nibley illuminates many details of Book of Mormon language matters in his *Lehi in the Desert, The World of the Jaredites, There Were Jaredites*, ed. John W. Welch (Deseret Book; FARMS, 1988); *An Approach to the Book of Mormon*, ed. John W. Welch, 3rd ed. (Deseret Book; FARMS, 1988); and *Since Cumorah*, ed. John W. Welch (Deseret Book; FARMS, 1988).
3. Donald W. Parry, in "Hebraisms and Other Ancient Peculiarities in the Book of Mormon," outlines the history of highlighting Hebraisms in the text, citing Thomas W. Brookbank (1905–1915), Sidney B. Sperry (1935, 1954), and

- E. Craig Bramwell (1961). See *Echoes and Evidences of the Book of Mormon*, ed. Donald W. Parry et al. (FARMS, 2002). Thereafter, John Tvedtnes (1970, 1986, 1991) has been a prolific published voice on Hebraisms, with support and echoes from Melvin D. Pack (1973), Angela Crowell (1982), Stephen D. Ricks (2002), Donald W. Parry (2002), and others.
4. See John W. Welch, “The Discovery of Chiasmus in the Book of Mormon: Forty Years Later,” *Journal of Book of Mormon Studies* 16, no. 2 (2007): 74–87.
 5. See Roberts, *Studies of the Book of Mormon*, 46, 63–87.
 6. Lyle Campbell lists 193 Native American language families in his *American Indian Languages: The Historical Linguistics of Native America* (Oxford University Press, 1997).
 7. See Sydney M. Lamb, “Linguistic Prehistory of the Great Basin,” *International Journal of American Linguistics* 24, no. 2 (1958): 95–100; and Brian D. Stubbs, *Uto-Aztecan: A Comparative Vocabulary* (Shumway Family History Services; Rocky Mountain Books, 2011), 4–6.
 8. Brian D. Stubbs, *Exploring the Explanatory Power of Semitic and Egyptian in Uto-Aztecan*, 2nd ed. (Challex Scientific Publications, 2023). All forms in this article are from *Exploring* and sources cited therein; *Exploring* is downloadable for free at bmslr.org. Pronounce the vowels in the data as in Spanish: a as in father, e in chevrolet, i in Kelli, o in open, u as in shoe. Below are some basics of linguistics.

The Comparative Method of historical linguistics is the proven tool used by linguists to establish related languages. As an ancient people splits up and their languages change, the sounds of one language will change consistently within itself, while a related language’s sounds likely change in a different direction, but still consistently within itself. This sets up a system of sound correspondences between related languages as descended from the proto-language, or original language. In the Indo-European languages below, we see *p > f (> means ‘changed to,’ so an original *p changed to f) in English (foot, father), *t > th (thou, three), and *k > h (hound, heart).

English	hound	water	thou	three	heart	foot	father
Latin	kanis	—	tu	tres	kord-	ped	pater
Hittite	—	watar	tuk	tri	kart	pata	—

Changes often include losing sounds at the ends of words (debut, knife). When consonants are clustered together, one consonant is often lost: debt, walk, talk, salmon, ex-mit > emit. Adjacent sounds often assimilate (become similar to one another): the Latin prefix *in-* ‘not’ changed to become more similar to the next consonant: (in)correct, (in)complete, (im)possible, (im)perfect, (il)legal, (il)logical, (ir)regular, (ir)responsible.

9. See Brian D. Stubbs, *Changes in Languages from Nephi to Now*, 2nd ed. (Four Corners Digital Design, 2020), 72–73, 80–81.
10. See Stubbs, *Changes in Languages*, 7, 32–46.

11. See Sidney B. Sperry, "The Language and Script of the Book of Mormon," in *Our Book of Mormon* (Bookcraft, 1950), 28–38.
12. See Nibley, *Lehi in the Desert*, 13–18.
13. For UA features specific to Late Egyptian, see Stubbs, *Exploring*, 32, 147–48.
14. Stubbs, in *Exploring*, 195–96, 423–25, and *Changes in Languages*, 83–84, addresses the Aramaic in UA.
15. See Cyrus H. Gordon, *Ugaritic Handbook I: Revised Grammar, Paradigms* (Pontificum Institutum Biblicum, 1947); John H. Huehnergard, *Ugaritic Vocabulary in Syllabic Transcription*, ed. Frank Moore Cross (Scholars' Press 1987), 296; and Stanislav Segert, *A Basic Grammar of the Ugaritic Language* (University of California Press, 1984), 51.
16. The development of the Phoenician alphabet, from which the Hebrew alphabet derived, is usually dated about 1500 to 1200 BC; see, for example, Angel Sáenz-Badillos, *A History of the Hebrew Language* (Cambridge University, 1993), 16–17.
17. Liquid-plus-pharyngeal clusters, like -rḥ- > -ḥ-, are backed by multiple examples, explained in Stubbs, *Exploring*, 141, 400–401.
18. Edward Sapir, "Southern Paiute and Nahuatl: A Study in Uto-Aztecan," pt. 1, *Journal de la Société des Américanistes de Paris* 10 (1913): 379–425; pt. 2, *American Anthropologist* 17 (1915): 98–120, 306–28. Parts 1 and 2 reprinted in William Bright, ed., *The Collected Works of Edward Sapir 5: American Indian Languages* (de Gruyter, 1990), 351–444.
19. For Semitic and Egyptian explaining previous unknowns, see Stubbs, *Exploring*, 376–90.
20. For Semitic and Egyptian explaining Hopi *w > l vs *w > w, see Stubbs, *Exploring*, 379–80.
21. For Semitic and Egyptian explaining Tarahumara initial r- vs. t-, see Stubbs, *Exploring*, 376–78.
22. In Stubbs, *Exploring*, 446, at the end of Appendix B, is a summary of the percentages of UA cognate sets that derive from Semitic or Egyptian, and for 90 percent of the most prevalent or widespread UA sets to be of Semitic or Egyptian origin is astounding.
23. Albert C. Baugh and Thomas Cable, *A History of the English Language*, 2nd ed. (Prentice Hall, 1978), 55.
24. For Semitic-p sounds to agree with Israelite Semitic and Semitic-kw to agree with Phoenician sound changes, see Stubbs, *Exploring*, 197–211.
25. Specialists studying Uto-Aztecan have long known that all four of the NUA branches either remained in or spread from what is presently Southern California. Sydney M. Lamb, "Linguistic Prehistory of the Great Basin," *International Journal of American Linguistics* 24, no. 2 (1958): 95–100; and Stubbs, *Uto-Aztecan: A Comparative Vocabulary*, 4–6.

26. Brian Stubbs, "Answering the Critics in 44 Rebuttal Points," *Interpreter: A Journal of Latter-day Saint Faith and Scholarship* 37 (2020): 237–92. At pp. 261–63, that article cites four studies addressing the same DNA evidence: L. Luca Cavalli-Sforza et al., *History and Geography of Human Genes* (Princeton University Press, 1994); James L. Guthrie, "Human Lymphocyte Antigens: Apparent Afro-Asiatic, Southern Asian, and European HLAs in Indigenous American Populations," *Pre-Columbiana: A Journal of Long-Distance Contacts* 2 and 3 (2000, 2001): 90–163; Stephen C. Jett, *Ancient Ocean Crossings: Reconsidering the Case for Contacts with the Pre-Columbian Americans* (University of Alabama Press, 2017), 345–46; and Phillip Leonard and Ali Ahmad Al-Shahri, "Undeciphered Script-like Signs Shared by Oman and Colorado," *Pre-Columbiana: A Journal of Long-Distance Contacts* 5, nos. 2–4; and vol. 6, no. 1 (2011–2014): 184–88.
27. Intensity of contact is exemplified in the Germanic languages: Icelandic, isolated in the Atlantic, has changed little from its Old Norse origins; the Germanic languages on the continent have changed a little more due to moderate contact; and when subject to intense contact under the new French-speaking rulers, English changed rapidly from 1066 to the fourteenth century. Likewise, Lehi's and Mulek's small original groups landing near larger but different established groups would undoubtedly cause their languages to change in different directions.
28. Gary A. Rendsburg, "Aramaic-like Features in the Pentateuch," *Hebrew Studies* 47 (2006): 163–76; Ian Young, *Diversity in Pre-Exilic Hebrew* (J. C. B. Mohr, 1993); and Gary A. Rendsburg, "Ancient Hebrew Phonology," in *Phonologies of Asia and Africa*, ed. Alan S. Kaye (Eisenbrauns, 1997), online offprint.
29. Israel Finkelstein, *The Forgotten Kingdom: The Archaeology and History of Northern Israel* (SBL, 2013), 154–55. Finkelstein speaks of "a dramatic growth of Jerusalem" from "a traditional highlands town to a large city" and that "the population of Judah at least doubled, if not tripled" in the late eighth century BC, as well as the appearance of "northern traits of material culture."
30. Dean Saxton et al., *Dictionary: Tohono O'odham / Pima to English, English to Tohono O'odham/Pima*, ed. R.L. Cherry, 2nd ed., revised and expanded (University of Arizona Press, 1983), 45, 180, online version.
31. The name that the Cora Indians call themselves vary slightly in different works, usually Naáyari or Náayeri. See Ambrosio McMahon and Maria Aiton de McMahon, *Cora y Español*, (Instituto Lingüística de Verano, 1959), under "naáyari," 150; and *Cora-Español* (SIL Language and Culture Archives, Bartholomew Collection of Unpublished Materials, SIL International-Mexico Branch, 2019), under "Náayeri," 214.
32. Baugh and Cable, *History of the English Language*, 81–85.
33. Stubbs, *Exploring*, item 885.
34. Stubbs, *Exploring*, item 1076.
35. Stubbs, *Exploring*, item 720.

36. Stubbs, *Exploring*, item 56.
37. Stubbs, *Exploring*, item 535.
38. Catherine S. Fowler, "Some Lexical Clues to Uto-Aztecan Prehistory," *International Journal of American Linguistics* 49 (1983): 224–57.
39. Jane H. Hill, "New Evidence for a Mesoamerican Homeland for Proto-Uto-Aztecan," *Proceedings of the National Academy of Sciences of the United States of America* 107, no. 11 (2010): E33.
40. Hill and Merrill later attempt to argue that the NUA forms are not cognates; however, the Hopi form is a cognate, and even if it were not, the SUA forms are prevalent throughout Piman into Arizona, so even the SUA terms are in nearly all SUA languages from the Nahua to Arizona, aligning with Hill's original case. Jane H. Hill and William L. Merrill, "Uto-Aztecan Maize Agriculture: A Linguistic Puzzle from Southern California," *Anthropological Linguistics* 59, no. 1 (Spring 2017): 1–23. Stubbs, *Exploring*, item 828.
41. Brian M. Kemp et al., "An Analysis of Ancient Aztec mtDNA from Tlatelolco: Pre-Columbian Relations and the Spread of Uto-Aztecan," in *Biomolecular Archaeology: Genetic Approaches to the Past*, ed. David M Reed (Center for Archaeological Investigations, Southern Illinois University, 2005), 22–46, 38.
42. Alexis Manaster-Ramer, personal communication.
43. Stubbs, *Uto-Aztecan: A Comparative Vocabulary*, 7.
44. These population numbers are from "Uto-Aztecan Languages," Wikipedia, with small adjustments according to personal knowledge. See https://en.m.wikipedia.org/wiki/Uto-Aztecan_languages.
45. Martha J. Macri and Matthew G. Looper, "Nahua in Ancient Mesoamerica: Evidence from Maya Inscriptions," *Ancient Mesoamerica* 14, no. 2 (October 2003): 285–97 (Cambridge University Press, 2003).
46. Karen Dakin and Soren Wichmann, "Cacao and Chocolate: A Uto-Aztecan Perspective," *Ancient Mesoamerican* 11 (2000): 55–75 (Cambridge University Press, 2000).
47. Gordon Whittaker, *Deciphering Aztec Hieroglyphs: A Guide to Nahuatl Writing* (University of California Press, 2021).
48. Lyle Campbell, *The Pipil Language of El Salvador* (de Gruyter, 1985), 9–12.
49. Una Canger, "Nawatl of North Guerrero, Not a Descendant of Reconstructed Common Nawatl," *Estudios de Cultura Nahuatl* 63 (enero/junio 2022): 135–56.
50. Wick R. Miller, "The Classification of the Uto-Aztecan Languages Based on Lexical Evidence," *International Journal of American Linguistics* 50, no. 1 (1984): 1–24; Mario Cortina-Borja and Leopoldo Valiñas C., "Some Remarks on Uto-Aztecan Classification," *International Journal of American Linguistics* 55, no. 2 (1989): 214–39; and Stubbs, *Uto-Aztecan: A Comparative Vocabulary*, 4–7.

51. "Nahuan Languages," Wikipedia, https://en.m.wikipedia.org/Nahuan_languages.